SERFF Tracking #: MGCC-128773883 State Tracking #:

Company Tracking #: CH-END-VAL12

State: Arkansas Filing Company: The Chesapeake Life Insurance Company

TOI/Sub-TOI: L08 Life - Other/L08.000 Life - Other

Product Name: Endorsements for Policy **Project Name/Number:** /CH-END-VALNON12

Filing at a Glance

Company: The Chesapeake Life Insurance Company

Product Name: Endorsements for Policy

State: Arkansas

TOI: L08 Life - Other Sub-TOI: L08.000 Life - Other

Filing Type: Form

Date Submitted: 11/20/2012

SERFF Tr Num: MGCC-128773883

SERFF Status: Closed-Approved-Closed

State Tr Num:

State Status: Approved-Closed Co Tr Num: CH-END-VAL12

Implementation On Approval

Date Requested:

Author(s): Jan Spoede

Reviewer(s): Linda Bird (primary)

Disposition Date: 11/28/2012

Disposition Status: Approved-Closed

Implementation Date:

State Filing Description:

SERFF Tracking #: MGCC-128773883 State Tracking #: Company Tracking #: CH-END-VAL12

State: Arkansas

TOI/Sub-TOI: L08 Life - Other/L08.000 Life - Other

Product Name: Endorsements for Policy **Project Name/Number:** /CH-END-VALNON12

General Information

Project Name: Status of Filing in Domicile: Pending

Project Number: CH-END-VALNON12 Date Approved in Domicile:

Requested Filing Mode: Review & Approval Domicile Status Comments: These forms were filed in a

compact filing with the ICC for the domiciliary state of

The Chesapeake Life Insurance Company

Oklahoma.

Filing Company:

Explanation for Combination/Other: Market Type: Individual Submission Type: New Submission Individual Market Type:

Overall Rate Impact: Filing Status Changed: 11/28/2012

State Status Changed: 11/28/2012

Deemer Date: Created By: Jan Spoede

Submitted By: Jan Spoede Corresponding Filing Tracking Number:

Filing Description:

ICC12-CH-END-VALNON12, Endorsement For Policy ICC12-CH-END-NFO12, Endorsement For Policy

We are filing the attached endorsements, CH-END-VAL12 and CH-END-NFO12 to comply with the reduction in the maximum valuation and non-forfeiture interest rates for 2013 life insurance issues. This is not an informational filing.

These endorsements will be utilized with two previously approved policy forms, CWLL 9/11 approved on October 28, 2011 under SERFF Tracking Number MGCC-127690050 and CWLG 9/11-AR approved on October 28, 2011 under SERFF Tracking Number MGCC-127690341. For Form CWLL 9/11 we will use endorsement CH-END-VAL12 to reduce the valuation rate from 4% to 3.5%. The reduction in the non-forfeiture rate will be deferred until 2014 for this product. For Form CWLG 9/11 we will use both endorsements to reduce the valuation and non-forfeiture rates. We are modifying our non-forfeiture values for 2013 issues for CWLG 9/11. No other changes are being made to the forms. With this filling, we have included revised actuarial memoranda (um) which reflect the changes made to valuation and non-forfeiture rates as appropriate.

Company and Contact

Filing Contact Information

Kym Glenn, Vice President kym.glenn@healthmarkets.com

9151 Boulevard 26 817-255-3195 [Phone] North Richland Hills, TX 76180 817-255-8153 [FAX]

Filing Company Information

The Chesapeake Life Insurance CoCode: 61832 State of Domicile: Oklahoma

Company Group Code: 264 Company Type: Health

9151 Boulevard 26 Group Name: State ID Number:

North Richland Hills, TX 76180 FEIN Number: 52-0676509

(817) 255-3100 ext. [Phone]

Filing Fees

SERFF Tracking #: MGCC-128773883 State Tracking #: Company Tracking #: CH-END-VAL12

State: Arkansas Filing Company: The Chesapeake Life Insurance Company

TOI/Sub-TOI: L08 Life - Other/L08.000 Life - Other

Product Name: Endorsements for Policy **Project Name/Number:** /CH-END-VALNON12

Fee Required? Yes

Fee Amount: \$100.00

Retaliatory? No

Fee Explanation: AR requires \$50.00 per endorsement. The domiciiary state of OK charges less

Per Company: No

CompanyAmountDate ProcessedTransaction #The Chesapeake Life Insurance Company\$100.0011/20/201265086625

SERFF Tracking #: MGCC-128773883 State Tracking #: CH-END-VAL12

State: Arkansas Filing Company: The Chesapeake Life Insurance Company

TOI/Sub-TOI: L08 Life - Other/L08.000 Life - Other

Product Name:Endorsements for PolicyProject Name/Number:/CH-END-VALNON12

Correspondence Summary

Dispositions

Status	Created By	Created On	Date Submitted
Approved-Closed	Linda Bird	11/28/2012	11/28/2012

SERFF Tracking #: MGCC-128773883 State Tracking #: CH-END-VAL12

State: Arkansas Filing Company: The Chesapeake Life Insurance Company

TOI/Sub-TOI: L08 Life - Other/L08.000 Life - Other

Product Name:Endorsements for PolicyProject Name/Number:/CH-END-VALNON12

Disposition

Disposition Date: 11/28/2012

Implementation Date: Status: Approved-Closed

Comment:

Rate data does NOT apply to filing.

Schedule	Schedule Item	Schedule Item Status	Public Access
Supporting Document	Flesch Certification		Yes
Supporting Document	Application		No
Supporting Document	Actuarial Memos		No
Supporting Document	Red Lined		Yes
Form	Endorsement to Policy		Yes
Form	Endorsement to Policy		Yes

SERFF Tracking #: MGCC-128773883 State Tracking #: CH-END-VAL12

Filing Company:

The Chesapeake Life Insurance Company

TOI/Sub-TOI: L08 Life - Other/L08.000 Life - Other

Arkansas

Product Name:Endorsements for PolicyProject Name/Number:/CH-END-VALNON12

Form Schedule

State:

Lead I	ead Form Number: CH-END-VAL12											
Item	Schedule Item	Form	Form	Form	Form	Action Specific	Readability					
No.	Status	Name	Number	Туре	Action	Data	Score	Attachments				
1		Endorsement to Policy	CH-END- NFO12	CERA	Initial		51.200	CH-END- NFO12[1].pdf				
2		Endorsement to Policy	CH-END- VAL12	CERA	Initial		52.700	CH-END- VAL12.pdf				

Form Type Legend:

ADV	Advertising	AEF	Application/Enrollment Form
CER	Certificate	CERA	Certificate Amendment, Insert Page, Endorsement of Rider
DDP	Data/Declaration Pages	FND	Funding Agreement (Annuity, Individual and Group)
MTX	Matrix	NOC	Notice of Coverage
ОТН	Other	OUT	Outline of Coverage
PJK	Policy Jacket	POL	Policy/Contract/Fraternal Certificate
POLA	Policy/Contract/Fraternal Certificate: Amendment, Insert Page, Endorsement or Rider	SCH	Schedule Pages

A Stock Company
(Hereinafter called: the Company, We, Our or Us)
Home Office: Oklahoma City, Oklahoma

Customer Service Address: 100 Centerview Drive, Suite 100, Nashville, Tennessee 37214

Customer Service: 1.866.215.5343

Administrative Office: P. O. Box 982010, North Richland Hills, Texas 76182-8010

www.thechesapeakelife.com

ENDORSEMENT TO POLICY [1234567890]

Effective upon receipt, this endorsement is added to and made a part of the policy referred to above.

The Section titled "Basis of Policy Values" is amended to read:

The guaranteed Policy Values applicable to this Policy are shown in the Table of Policy Values. Values shown apply only if the Policy is free from a Policy loan. Values for Policy years not shown will be furnished upon request. Values are shown for the end of a Policy year when premiums were paid for the full Policy year. If premiums were paid for a part of a Policy year, values will be calculated on a consistent basis with allowance for the length of time premiums were paid.

All guaranteed minimum cash values, present values and net single premiums are calculated on the following basis:

- 1. Interest at 4.50% per year.
- 2. Mortality as provided in the Commissioners 2001 Standard Ordinary Mortality Tables, curtate; male or female whichever applicable, with distinction for non-tobacco or tobacco use, age last birthday.
- 3. On the assumption that Death Benefits are payable at the end of the Policy year in which the Insured Person dies and that premiums are paid annually in advance.

The non-forfeiture values are at least equal to those required by law of the state in which this policy is delivered. A detailed statement of the method of computing values has been filed with the insurance supervisory official of that state. The cash surrender or death benefit that may be available under this policy are not less than the minimum benefits required by any statute of the state in which this policy is issued.

Secretary

Leggy 19 Simps

President

A Stock Company (Hereinafter called: the Company, We, Our or Us) Home Office: Oklahoma City, Oklahoma

[Customer Service Address: 100 Centerview Drive, Suite 100, Nashville, Tennessee 37214

Customer Service: 1.866.215.5343]

Administrative Office: P. O. Box 982010, North Richland Hills, Texas 76182-8010

[www.thechesapeakelife.com]

ENDORSEMENT TO POLICY [123456]

Effective upon receipt, this endorsement is added to and made a part of the policy referred to above.

The Section titled "Reserves" is amended to read:

The Actuarial reserves are computed in accordance with the Commissioner's Reserve Valuation Method (CRVM), mortality as provided in the Commissioners 2001 Standard Ordinary Mortality Tables with interest at [3.50%], for male or female, and age last birthday, with distinction for non-tobacco or tobacco use, assuming deaths occur throughout the Policy year and premiums are payable annually. The actuarial reserves are equal to or greater than those required by law of the state in which this Policy is delivered.

SECRETARY

Leggy 14 Sun

PRESIDENT

SERFF Tracking #:	MGCC-128773883	State Tracking #:	Company Tracking #:	CH-END-VAL12

State: Arkansas
TOI/Sub-TOI: L08 Life - Other/L08.000 Life - Other

Product Name:Endorsements for PolicyProject Name/Number:/CH-END-VALNON12

Filing Company: The Chesapeake Life Insurance Company

Supporting Document Schedules

		Item Status:	Status Date:
Satisfied - Item:	Flesch Certification		
Comments:			
Attachment(s):			
CWLG and End Read_Cert.pdf			
CWLL and End Read_Cert.pdf			
CH AR Cert of Bull 11-83.pdf			
CH AR Cert of Bull 19.pdf			
CH AR Cert of Reg 34.pdf			
		Item Status:	Status Date:
Satisfied - Item:	Red Lined		
Comments:			
Attachment(s):			
CWLG 9-11 RedLined.pdf			
CWLL 9-11 Red Line pdf			

CERTIFICATION OF READABILITY

FORM: CWLG 9/11, CH-END-VALNON12, CH-END-NFO12, & CH-END-

VAL12

This is to certify that Chesapeake Life Insurance Company form: CWLG 9/11, CH-END-VALNON12, CH-END-NFO12, CH-END-VAL12 have achieved a Flesch Reading Ease Score of 51.20.

Michael R. Khoury, JD

Director Compliance

The Chesapeake Life Insurance Company

Date: 15 November 2012

CERTIFICATION OF READABILITY FORM: CWLL 9/11 & CH-END-VALNON12-CA & CH-END-VAL12

This is to certify that Chesapeake Life Insurance Company form: CWLL 9/11 and CH-END-VALNON12-CA, and CH-END-VAL12 have achieved a Flesch Reading Ease Score of 52.70.

Michael R. Khoury, JD

Director Compliance

The Chesapeake Life Insurance Company

Date: 15 November 2012

CERTIFICATION

The undersigned, an officer of The Chesapeake Life Insurance Company, does hereby certify that he has personally reviewed the guidelines of Arkansas Bulletin Number 11-83, and does further certify that forms CH-END-VAL12 and CH-END-NFO12 does comply with the guidelines of such Bulletin.

Michael Khoury, JD

Director

Compliance and Product Development

Date: 20 November 2012

THE HERITAGE UNION LIFE INSURANCE COMPANY

CERTIFICATION

The undersigned, an officer of Texas Life Insurance Company, Waco, Texas, does hereby certify that he has personally reviewed the guidelines of Arkansas Bulletin Number 19, Unfair Sex Discrimination in the Sale of Insurance, and does comply with the guidelines of such Bulletin.

Michael Khoury, JD

Director

Compliance and Product Development

Date: 20 November 2012

THE HERITAGE UNION LIFE INSURANCE COMPANY

CERTIFICATION OF COMPLIANCE

This is to certify that the actuarial demonstration for policy form CH-END-VAL12 and CH-END-NFO12 is in compliance with Regulation 34 for the state of Arkansas (Valuation and Nonforfeiture), and that when calculating reserves under the minimum reserve method in Regulation 34, in no case shall the reserves be less than the actual cash surrender values provided for under the policy contract.

David Groman, ASA, MAAA

Actuary

ACTUARIAL DEMONSTRATION (WHOLE LIFE INSURANCE)



This is to certify that the attached Actuarial Demonstration for policy form CWLG 9/11 is a true demonstration of minimum valuation and cash values, if any.

	Joseph Barclay Cole, FSA, MAAA
	Actuary
Signed	

WHOLE LIFE INSURANCE Actuarial Demonstration of Reserves and Values Calculations

I. <u>Description of Contract Characteristics</u>

Death Benefit:

\$300 year 1, \$700 year 2, and \$1,000 per unit all policy years

thereafter

Premiums:

Guaranteed annual premium payable for life

Issue Ages:

50-85

Face Amounts:

\$3,000 - \$35,000 ages 50-80 \$2,000 - \$35,000 ages 81-85

Nonforfeiture:

The policy holder has two options with respect to nonforfeiture, surrender the policy for its cash value or use the policy's cash value to purchase Reduced Paid-Up insurance (RPU). RPU for this product is essentially the purchase of a single premium whole life policy. Once elected, RPU can then subsequently be surrendered for its cash value.

II. Basis of Values

Mortality:

2001 CSO Tables - Reserves, Cash Values and Reduced Paid-Up

Age Last Birthday Male or Female

Nonsmoker or Smoker (Non-Tobacco or Tobacco) Curtate Functions for Cash Values and Reduced Paid-Up

Semi-Continuous Functions for Reserves

Interest:

4595.00% for Cash Values and Reduced Paid-Up

3.5074.00% for Reserves

Nonforfeiture Values: Certificate values are minimum values, using the assumptions above,

computed in accordance with the Standard Nonforfeiture Law using the

adjusted premium method.

Reserves:

Reserves are computed in accordance with the Commissioners'

Reserve Valuation Method (CRVM)

Terminal reserve factors are rounded to the near cent

Maturity Age:

100

III. General Formulae

Since this is a non-level death benefit it is necessary to adjust the C_x commutation function to account for a non-level payment. Adjusting C_x by applying a 0.3 factor in year 1 and by applying a 0.7 factor in year 2 is sufficient to cause the "normal" commutation functions to perform their tasks. Note in years 3+ there are no factors applied to C_x (i.e. a factor of 1 is used). Implicit in altering the C_x function is an altered M_x function. In the following illustration an altered C_x and altered M_x function are assumed.

Since this product matures at age 100, A_{x+t} is defined as follows:

$$A_{x+t} = (M_{x+t} - M_{100} + D_{100}) / D_{x+t}$$

$$\ddot{\mathbf{a}}_{x+t} = (\mathbf{N}_{x+t} - \mathbf{N}_{100}) / \mathbf{D}_{x+t}$$

Nonforfeiture Adjusted Premium:

DB_t = Death Benefit in Policy Year t

$$ELA = (DB_1 + DB_2 + ... + DB_{10}) / 10 = 900$$

$$P_{v}^{NL} = 1000 * A_{v} / \ddot{a}_{v}$$

$$P_{x}^{\ A} = (1000*A_{x} + (.01)*ELA + 1.25*Min \ of \ \{(.04*ELA) \ and \ P_{x}^{\ NL}\}) \ / \ \ddot{a}_{x}$$

Cash Value Formula:

$$_{t}CV_{x} = 1000 * A_{x+t} - P_{x}^{A} * \ddot{a}_{x+t}$$

Reduced Paid-Up Insurance (rounded to high dollar)

$$_{t}RPU_{x} = _{t}CV_{x} / A_{x+t}$$

Let RPUFace = ${}_{t}RPU_{x}$ be the amount of RPU purchased at time x+t.

Let kRPUCVx+t be the cash value associated with the RPU purchased at time x+t.

$$_{t}$$
RPUCV_{x+t} = RPUFace * A_{x+t+k}

Valuation Net Premiums:

$$P_{x}^{NL} = 1000 * \bar{A}_{x} / \ddot{a}_{x}$$

$$\beta_x^{CRVM} = 1000 * \bar{A}_{x+1} / \ddot{a}_{x+1}$$

but not greater than

$$P_{x}^{\text{ NL}} + 1000 * (_{19} \overline{P}_{x+1} - c_{x}) / \ddot{a}_{x}$$

Where
$$c_x = C_x * (i / \delta) / D_x$$

$$\alpha_x^{CRVM} = 1000 * \bar{A}_x - \beta_{xCRVM} * \ddot{a}_x$$

Semi-Continuous Terminal Reserves:

$$_{t}\overline{V}_{x} = 1000 * \bar{A}_{x+t} - \beta_{x}^{CRVM} * \ddot{a}_{x+t}$$

IV. Cash Value Sample Calculations

Male, Non-Tobacco

Issue Age: 50 2001 CSO, ALB, 5.08% 4, 5

End Pol				Adjusted	Adjusted	1000		DI IED		CV	,RPU,
Year(t)	DB _t	C _{x+t}	M_{x+t}	C _{x+t}	M_{x+t}	D_{x+t}	N_{x+t}	PVFB _{x+t}	ä _{x+t}	tCV ^x	(4,0)
0		27,151.79	2.227.166.08	8,145.54	2,199,711.87	8,263,587.03	126,764,839.89	266.25721	15.33883	0.00	0.00
1	300	28,159.86	2.200.014.29	19,711.90	2,191,566.34	7,842,931.10	118,501,252.86	279.49934	15.10789	0.00	0.00
2	700	29,481.72	2,171,854.44	29,481.72	2,171,854.44	7,441,298.33	110,658,321.76	291.93591	14.86935	5.00	17.13
2	1,000	30,985.65	2142.372.72	30,985.65	2,142,372.72	7,057,469.08	103,217,023.43	303.63583	14.62365	21.00	69.17
3	1,000	33,006.04	2.111.387.07	33,006.04	2,111,387.07	6,690,413.47	96,159,554.36	315.66283	14.37108	38.00	120.39
5	1,000	35,135.15	2,078,381.03	35,135.15	2,078,381.03	6,338,816.31	89,469,140.89	327.96483	14.11274	55.00	167.71
5	1,000	37,039.88	2,043,245.88	37,039.88	2,043,245.88	6,001,832.76	83,130,324.58	340.52492	13.84898	73.00	214.38
7	1,000	38,508.97	2,006,206.00	38,508.97	2,006.206.00	5,678,991.32	77,128,491.81	353.36095	13.57942	91.00	257.53
/	1,000	39,687.26	1,967,697.03	39,687.26	1,967,697.03	5,370,054.19	71,449,500.49	366.51861	13.30311	109.00	297.40
0	1,000	41,128.83	1,928,009.77	41,128.83	1,928,009.77	5,074,650.07	66,079,446.30	380.03360	13.01929	128.00	336.82
9	1,000	42,989.93	1.886,880.94	42.989.93	1,886,880.94	4,791,871.23	61,004,796.23	393.87717	12.72858	148.00	375.76
10	1,000	45,336.13	1,843,891.01	45,336.13	1,843,891.01	4,520,696.96	56,212,925.00	407.99434	12.43212	168.00	411.78
11	14.900	47,956.44	1,798,554.88	47,956.44	1,798,554.88	4.260.089.54	51,692,228.04	422.31099	12.13147	188.00	445.17
12	1,000	50,516.82	1,750,598.44	50,516.82	1,750,598.44	4,009,271.70	47,432,138.49	436.76915	11.82785	208.00	476.23
13	1,000		1,700,081.62	52,749.72	1,700,081.62	3,767,837.18	43,422,866.79	451.34896	11.52167	229.00	507.37
14	1,000	52,749.72	1,700,001.02	54,651.30	1,647,331.89	3,535,666.64	39,655,029.62	466.06760	11.21258	249.00	534.26
15	1,000	54,651.30	1,592,680.59	56,094.21	1,592,680.59	3,312,650.26	36,119,362.98	480.94674	10.90012	270.00	561.40
16	1,000	56,094.21		57,254.22	1,536,586.38	3.098.810.79		496.03356	10.58330	292.00	588.67
17	1,000	57,254.22	1,536,586.38	The state of the s	1,479,332.16	2,893,994.16		511.35553	10.26153	313.00	612.10
18	1,000	58,183.06	1,479,332.16		1,479,332.10	2,698,001.85		526.93695	9.93432	335.00	635.75
19	1,000	59,176.17	1,421,149.10	A STATE OF THE STA	CONTRACTOR	2,510,349.40		542.75341	9.60218	357.00	657.76
20	1,000	60,415.74	1,361,972.92	60,415.74	1,361,972.92	2,010,043.40	27,110,000.02	0.12.7.00.77			

Net Level Prem = 17.35838

Adjusted Prem = 19.35970

REVISED TO REFLECT NEW INTEREST RATES

Reserve Sample Calculations V.

Male, Non-Tobacco

Issue Age: 50 2001 CSO, ALB, 4.00% 3. 5 %

			Adjusted	Adjusted					-
DB.	C.,	My+t	C _{x+1}	M _{x+t}	D _{x+1}	N_{x+t}	PVFB _{x+t}	ä _{x+t}	,V _x
54				4 584 673 68	13,334,188.61	228,643,368.18	343.89629	17.14496	0.00
200				Mark Control of the C	12,777,101.59	215,309,179.57	357.83109	16.84889	0.00
	The Assessment Control					202,532,077.98	370.85101	16.54522	19.47
		100		and the second particular and the second			383.03582	16.23456	38.25
					The state of the s		395.47881	15.91733	57.43
				Of the state of th			408.12915	15.59480	76.93
						50	420.96872	15.26745	96.72
1.00								14.93493	116.83
		Company of the Compan				The state of the s		14.59625	137.30
	A		100000000000000000000000000000000000000				TO SHALL COMPANY AND ADDRESS OF THE PARTY AND		158.20
1,000	ACC 10 (100 (100 (100 (100 (100 (100 (100								179.46
1,000	78,600.41								201.01
1,000	83,687.09		1011 C 1000 C 10						222.75
1,000	89,375.17	3,875,395.87	89,375.17			State of the state		The state of the s	244.58
1,000	95,052.15	3,786,020.70	95,052.15		The second secon		I .		266.48
1,000	100,207,92	3,690,968.55	100,207.92	3,690,968.55				0.55	
100	104,818.61	3,590,760.63	104,818.61	3,590,760.63					288.48
		3,485,942.02	108,620.51	3,485,942.02	6,229,725.79	and the second s			310.59
50 CO 155	1000 B.		111,932.77	3,377,321.50	5,883,616.60	66,874,409.00			332.89
			The state of the s	3,265,388.73	5,547,571.58	60,990,792.40	588.77889		355.40
		A The second sec		3,150,546.32	5,221,598.41	55,443,220.82	603.54136		378.16
	100000000000000000000000000000000000000			Section of the sectio	4.905.139.42	50,221,622.42	618.43805	10.23262	401.12
	1,000 1,000	300 45,112.50 300 47,237.28 700 49,930.18 1,000 52,981.83 1,000 61,237.87 1,000 65,178.42 1,000 68,415.12 1,000 74,481.51 1,000 78,600.41 1,000 83,687.09 1,000 89,375.17 1,000 100,207.92 1,000 104,818.61 1,000 104,818.61 1,000 111,932.77 1,000 114,842.41 1,000 117,925.73	300 47,237.28 4,630,423.61 47,237.28 4,585,311.12 700 49,930.48 4,585,311.12 4,538,073.84 4,488,143.66 1,000 56,979.12 4,435,161.83 1,000 65,178.42 4,316,944.84 1,000 68,415.12 4,251,766.42 1,000 74,481.51 4,112,164.88 1,000 78,600.41 4,037,683.37 1,000 83,687.09 3,959,082.96 1,000 89,375.17 3,875,395.87 1,000 100,207.92 3,690,968.55 1,000 104,818.61 3,590,760.63 1,000 108,620.51 3,485,942.02 1,000 114,842.41 3,265,388.73 1,000 114,842.41 3,265,388.73 1,000 117,925.73 3,150,546.32	DB _I C _{x+1} M _{x+t} C _{x+t} 300 45,112.50 4,630,423.61 13,533.75 700 49,930.18 4,538,073.84 49,930.18 1,000 52,981.83 4,488,143.66 52,981.83 1,000 61,237.87 4,378,482.71 61,237.87 1,000 65,178.42 4,316,944.84 65,178.42 1,000 71,186.43 4,183,351.31 71,186.43 1,000 74,481.51 4,112,164.88 74,481.51 1,000 83,687.09 3,959,082.96 38,687.09 1,000 89,375.17 3,766,020.70 95,052.15 1,000 104,818.61 3,590,760.63 104,818.61 1,000 104,818.61 3,590,760.63 104,818.61 1,000 111,932.77 3,377,321.50 111,932.77 1,000 114,842.41 3,265,388.73 114,842.41 1,000 117,925.73 3,150,546.32 117,925.73	DB _I C _{x+1} M _{x+t} C _{x+t} M _{x+t} 300 47,237.28 4,630,423.61 13,533.75 4,584,673.68 700 49,930.18 4,538,073.84 49,930.18 4,538,073.84 1,000 52,981.83 4,488,143.66 52,981.83 4,488,143.66 1,000 61,237.87 4,378,182.71 61,237.87 4,378,182.71 1,000 65,178.42 4,316,944.84 65,178.42 4,316,944.84 1,000 68,415.12 4,251,766.42 68,415.12 4,251,766.42 1,000 71,186.43 4,183,351.31 71,186.43 4,127,164.88 1,000 74,481.51 4,112,164.88 78,600.41 4,037,683.37 1,000 89,375.17 3,875,395.87 3,959,082.96 3,959,082.96 1,000 95,052.15 3,786,020.70 95,052.15 3,786,020.70 1,000 104,818.61 3,590,760.63 104,818.61 3,590,760.63 1,000 104,818.61 3,687,942.02 108,620.51 3,485,942.02 1,000	DB _I C _{x+1} M _{x+1} C _{y+1} M _{x+1} D _{x+1} 300 45,112.50 4,630,423.61 13,533.75 4,584,673.68 13,334,188.61 700 49,930.18 4,585,311.12 33,066.09 4,571,139.93 12,777,101.59 700 49,930.18 4,538,073.84 49,930.18 4,538,073.84 12,239,357.61 1,000 52,981.83 4,488,143.66 52,981.83 4,488,143.66 11,719,655.66 1,000 61,237.87 4,378,182.71 61,237.87 4,378,182.71 61,237.87 4,378,182.71 10,729,659.85 1,000 65,178.42 4,316,944.84 65,178.42 4,316,944.84 10,256,935.80 1,000 71,186.43 4,183,351.31 71,186.43 4,183,351.31 9,798,529.67 1,000 74,481.51 4,112,164.88 74,481.51 4,112,164.88 8,924,989.76 1,000 83,687.09 3,959,082.96 83,687.09 3,959,082.96 8,104,364.05 1,000 89,375.17 3,786,020.70 95,052.15 3,786,020.70	DB _i C _{x+1} M _{x+t} C _{x+1} M _{x+t} D _{x+t} N _{x+t} 300 45,112.50 4,630,423.61 13,533.75 4,584,673.68 13,334,188.61 228,643,368.18 700 49,930.18 4,538,073.84 49,930.18 4,538,073.84 12,777,101.59 215,309,179.57 1,000 52,981.83 4,488,143.66 52,981.83 4,488,143.66 11,719,655.66 190,292,720.37 1,000 56,979.12 4,435,161.83 56,979.12 4,435,161.83 11,216,950.05 176,73,064.71 1,000 61,237.87 4,376,182.71 61,237.87 4,378,182.71 10,729,659.85 167,356,114.66 1,000 65,178.42 4,316,944.84 65,178.42 4,316,944.84 10,256,935.80 156,626,454.81 1,000 71,186.43 4,183,351.31 71,186.43 4,121,164.88 4,924,989.76 127,216,408.45 1,000 78,600.41 4,037,683.37 7,481.51 4,037,683.37 3,875,395.87 3,959,082.96 8,104,360.05 110,360.05 101,678,364.15 1,000	DB C _{x+1} M _{x+1} C _{x+1} M _{x+1} D _{x+1} D _{x+1} N _{x+1} PVFB _{x+1}	DB C M C M C M C M D D

Alpha = 1.01497

Beta = 21.23767

REVISED TO REFLECT NEW INTEREST RATES

RPU Cash Value Sample Calculation

RPU Cash Value Exhibit

Male, Non-Tobacco Issue Age: 50

RPU Election Year 10 2001 CSO, ALB, 5.00% 4.5%

From the Cash Value Exhibit:

 $_{10}CV_{50} = 148.00$ RPUFace = 375.76 REVISED TO NEWES

End of Policy Year		RPU Year	RPUFace	A_{x+t}	RPUCV _{x+t}	
Folicy Teal	10	0	375.76	0.3938772	148.	00
	10 11	,	375.76	0.4079943	153.	31
	12	2	375.76		158.	69
	13	3	375.76		164.	.12
	14		375.76		169.	.60
	15		5 S S S S S S S S S S S S S S S S S S S		175	.13
	16	_	/	0.4869467	180	.72
	17	7	375.76	0.4960336	186	.39
	18	8	375.76	0.5113555	192	
	19				198	.00
	20	(203	.9

Smoothness Certification

This form provides for cash values that are equal to minimum non-forfeiture based cash values. A sample calculation is provided above. The sample calculation in conjunction with the formulas in this actuarial memorandum demonstrate that these cash values are the same as minimum values. Accordingly, a smoothness demonstration would entail the same formulas as the cash value demonstration with the assumption that the "nonforeiture factor", as defined in the smoothness regulation, would be 1 for all years. Therefore, we are certifying that this product is in compliance with the smoothness requirements of the IIPRC.

Certification of Compliance

I, Joseph Barclay Cole, am a member of the American Academy of Actuaries. I hereby certify that to the best of my knowledge this filing complies with the NAIC Standard Nonforfeiture Law for Life Insurance, model #808, for all ages, rate classes and durations at which the policy is available.

	Joseph Barclay Cole, FSA, MAAA
	Actuary
Signed Date	

9151 Boulevard 26 North Richland Hills Texas, 76180

POLICY FORM CWLL 9/11 ACTUARIAL DEMONSTRATION (WHOLE LIFE INSURANCE)

RKD LINE

This is to certify that the attached Actuarial Demonstration for policy form CWLL 9/11 is a true demonstration of minimum valuation and cash values, if any.

> Virgil Meier, FSA, MAAA Director Actuarial

Signed: Date: 10/17/2011

9151 Boulevard 26 North Richland Hills Texas, 76180

WHOLE LIFE INSURANCE Actuarial Demonstration of Reserves and Values Calculations

I. <u>Description of Contract Characteristics</u>

Death Benefit: Level \$1,000 per unit all policy years

Premiums: Guaranteed annual premium payable for life

Issue Ages: 45-85

Nonforfeiture: The policy holder has two options with respect to nonforfeiture,

surrender the policy for its cash value or use the policy's cash value to purchase Reduced Paid-Up insurance (RPU). RPU for this product is essentially the purchase of a single premium whole life policy. Once elected, RPU can then subsequently be surrendered for its cash value.

II. Basis of Values

Mortality: 2001 CSO Tables – Reserves, Cash Values and Reduced Paid-Up

Age Last Birthday Male or Female

Nonsmoker or Smoker (Non-Tobacco or Tobacco) Curtate Functions for Cash Values and Reduced Paid-Up

Semi-Continuous Functions for Reserves

Interest: 5.00% for Cash Values and Reduced Paid-Up

3.5%4.00% for Reserves

Nonforfeiture Values: Certificate values are minimum values, using the assumptions above,

computed in accordance with the Standard Nonforfeiture Law,

amended in 1980, using the adjusted premium method.

Reserves: Reserves are computed in accordance with the Commissioners'

Reserve Valuation Method (CRVM)

Terminal reserve factors are rounded to the near cent

Maturity Age: 100

III. General Formulae

Since this product matures at age 100, A_{x+t} is defined as follows:

$$A_{x+t} = (M_{x+t} - M_{100} + D_{100}) / D_{x+t}$$

$$\ddot{a}_{x+t} = (N_{x+t} - N_{100}) / D_x$$

Nonforfeiture Adjusted Premium:

$$P_{x}^{NL} = 1000 * A_{x} / \ddot{a}_{x}$$

 $P_x^A = (1000*A_x + (.01)*1000 + 1.25*Min of \{(.04*1000) and P_x^{NL}\}) / \ddot{a}_x$

Cash Value Formula:

$$_{t}CV_{x} = 1000 * A_{x+t} - P_{x}^{A} * \ddot{a}_{x+t}$$

Reduced Paid-Up Insurance (rounded to high dollar)

$$_{t}RPU_{x} = _{t}CV_{x} / A_{x+t}$$

Let RPUFace = $_{t}$ RPU $_{x}$ be the amount of RPU purchased at time x+t.

Let $_k RPUCV_{x+t}$ be the cash value associated with the RPU purchased at time x+t.

$$_{k}$$
RPUCV_{x+t} = RPUFace * A_{x+t+k}

Valuation Net Premiums:

$$P_x^{\rm NL} = 1000 * \bar{A}_x / \ddot{a}_x$$

$$\beta_x^{\text{CRVM}} = 1000 * \bar{A}_{x+1} / \ddot{a}_{x+1}$$

but not greater than

$$P_x^{NL} + 1000 * (_{19} \overline{P}_{x+1} - c_x) / \ddot{a}_x$$

Where
$$c_x = C_x * (i / \delta) / D_x$$

$$\alpha_x^{CRVM} = 1000 * \bar{A}_x - \beta_{xCRVM} * \ddot{a}_x$$

Semi-Continuous Terminal Reserves:

$$_{t}$$
 $\overline{V}_{x} = 1000 * \bar{A}_{x+t} - \beta_{x}^{CRVM} * \ddot{a}_{x+t}$

IV. Cash Value Sample Calculations

Male, Non-Tobacco Issue Age: 50 2001 CSO, ALB, 5.00%

End Pol									
Year(t)	DB _t	C _{x+t}	M _{x+t}	D _{x+t}	N _{x+t}	1000A _{x+t}	ä _{x+t}	_t CV _x	tRPU
0	1,000	27,151.79	2,227,166.08	8,263,587.03	126,764,839.89	269.57952	15.33883	0.00	0.00
1	1,000	28,159.86	2,200,014.29	7,842,931.10	118,501,252.86	280.57649	15.10789	0.00	0.00
2	1,000	29,481.72	2,171,854.44	7,441,298.33	110,658,321.76	291.93591	14.86935	0.00	0.00
3	1,000	30,985.65	2,142,372.72	7,057,469.08	103,217,023.43	303.63583	14.62365	17.00	55.9
4	1,000	33,006.04	2,111,387.07	6,690,413.47	96,159,554.36	315.66283	14.37108	34.00	107.7
5	1,000	35,135.15	2,078,381.03	6,338,816.31	89,469,140.89	327.96483	14.11274	51.00	155.5
6	1,000	37,039.88	2,043,245.88	6,001,832.76	83,130,324.58	340.52492	13.84898	69.00	202.6
7	1,000	38,508.97	2,006,206.00	5,678,991.32	77,128,491.81	353.36095	13.57942	87.00	246.2
8	1,000	39,687.26	1,967,697.03	5,370,054.19	71,449,500.49	366.51861	13.30311	105.00	286.4
9	1,000	41,128.83	1,928,009.77	5,074,650.07	66,079,446.30	380.03360	13.01929	125.00	328.9
10	1,000	42,989.93	1,886,880.94	4,791,871.23	61,004,796.23	393.87717	12.72858	144.00	365.6
11	1,000	45,336.13	1,843,891.01	4,520,696.96	56,212,925.00	407.99434	12.43212	164.00	401.9
12	1,000	47,956.44	1,798,554.88	4,260,089.54	51,692,228.04	422.31099	12.13147	184.00	435.7
13	1,000	50,516.82	1,750,598.44	4,009,271.70	47,432,138.49	436.76915	11.82785	205.00	469.3
14	1,000	52,749.72	1,700,081.62	3,767,837.18	43,422,866.79	451.34896	11.52167	225.00	498.5
15	1,000	54,651.30	1,647,331.89	3,535,666.64	39,655,029.62	466.06760	11.21258	246.00	527.8
16	1,000	56,094.21	1,592,680.59	3,312,650.26	36,119,362.98	480.94674	10.90012	267.00	555.1
17	1,000	57,254.22	1,536,586.38	3,098,810.79	32,806,712.72	496.03356	10.58330	288.00	580.6
18	1,000	58,183.06	1,479,332.16	2,893,994.16	29,707,901.93	511.35553	10.26153	310.00	606.2
19	1,000	59,176.17	1,421,149.10	2,698,001.85	26,813,907.77	526.93695	9.93432	332.00	630.0
20	1,000	60,415.74	1,361,972.92	2,510,349.40	24,115,905.92	542.75341	9.60218	354.00	652.2

Net Level Prem = 17.57497

Adjusted Prem = 19.65914

Reserve Sample Calculations V.

Male, Non-Tobacco

Issue Age: 50 2001 CSO, ALB, 4.06% 3. 5 %

End Pol								
Year(t)	DB _t	C _{x+t}	M _{x+t}	D _{x+t}	N _{x+t}	1000A _{x+t}	ä _{x+t}	$\overline{tV_x}$
0	1,000	45,112.50	4,630,423.61	13,334,188.61	228,643,368.18	347.32731	17.14496	0.00
1	1,000	47,237.28	4,585,311.12	12,777,101.59	215,309,179.57	358.94020	16.84889	0.00
2	1,000	49,930.18	4,538,073.84	12,239,357.61	202,532,077.98	370.85101	16.54522	18.38
3	1,000	52,981.83	4,488,143.66	11,719,655.66	190,292,720.37	383.03582	16.23456	37.18
4	1,000	56,979.12	4,435,161.83	11,216,950.05	178,573,064.71	395.47881	15.91733	56.38
5	1,000	61,237.87	4,378,182.71	10,729,659.85	167,356,114.66	408.12915	15.59480	75.91
6	1,000	65,178.42	4,316,944.84	10,256,935,80	156,626,454.81	420.96872	15.26745	95.72
7	1,000	68,415.12	4,251,766.42	9,798,529.67	146,369,519.01	434.01111	14.93493	115.85
8	1,000	71,186.43	4,183,351.31	9,354,580.90	136,570,989.35	447.29482	14.59625	136.34
9	1,000	74,481.51	4,112,164.88	8,924,989.76	127,216,408.45	460.84861	14.25068	157.26
10	1,000	78,600.41	4,037,683.37	8,508,690.48	118,291,418.68	474.64268	13.89899	178.55
11	1,000	83,687.09	3,959,082.96	8,104,364.05	109,782,728.20	488.62406	13.54252	200.12
12	1,000	89,375.17	3,875,395.87	7,710,601.06	101,678,364.15	502.72347	13.18304	221.88
13	1,000	95,052.15	3,786,020.70	7,326,405.53	93,967,763.09	516.88716	12.82192	243.74
14	1,000	100,207.92	3,690,968.55	6,951,420.37	86,641,357.56	531.09618	12.45963	265.66
15	1,000	104,818.61	3,590,760.63	6,585,802.40	79,689,937.19	545.36481	12.09583	287.68
16	1,000	108,620.51	3,485,942.02	6,229,725.79	73,104,134.79	559.71104	11.73004	309.82
17	1,000	111,932.77	3,377,321.50	5,883,616.60	66,874,409.00	574.17504	11.36124	332.14
18	1,000	114,842.41	3,265,388.73	5,547,571.58	60,990,792.40	588.77889	10.98888	354.68
19	1,000	117,925.73	3,150,546.32	5,221,598.41	55,443,220.82	603.54136	10.61246	377.46
20	1,000	121,553.58	3,032,620.59	4,905,139.42	50,221,622.42	618.43805	10.23262	400.45
pha = 3.38322 eta = 21.30349	R	EJISKD	70 R	ther	NEW I	WiEnt	ST RA	E

Beta = 21.30349

VI. RPU Cash Value Sample Calculations

RPU Cash Value Exhibit

Male, Non-Tobacco Issue Age: 50 RPU Election Year 10 2001 CSO, ALB, 5.00%

From the Cash Value Exhibit:

 $_{10}CV_{50} = 144.00$ RPUFace = 365.60

End of						
Policy Year		RPU Year	RPUFace		A_{x+t}	kRPUCV _{x+t}
	10	0	365.6	0	0.3938772	144.00
	11	1	365.6	0	0.4079943	149.16
	12	2	365.6	0	0.4223110	154.40
	13	3	365.6	0	0.4367692	159.68
	14	4	365.6	0	0.4513490	165.01
	15	5	365.6	0	0.4660676	170.39
	16	6	365.6	0	0.4809467	175.83
	17	7	365.6	0	0.4960336	181.35
	18	8	365.6	0	0.5113555	186.95
	19	9	365.6	0	0.5269369	192.65
	20	10	365.6	0	0.5427534	198.43

VII. Smoothness Certification

This form provides for cash values that are equal to minimum non-forfeiture based cash values. A sample calculation is provided above. The sample calculation in conjunction with the formulas in this actuarial memorandum demonstrate that these cash values are the same as minimum values. Accordingly, a smoothness demonstration would entail the same formulas as the cash value demonstration with the assumption that the "nonforeiture factor", as defined in the smoothness regulation, would be 1 for all years. Therefore, we are certifying that this product is in compliance with the smoothness requirements of your state.

VIII. Certification of Compliance

I, Virgil Meier, am a member of the American Academy of Actuaries. I hereby certify that to the best of my knowledge this filing complies with the NAIC Standard Nonforfeiture Law for Life Insurance, model #808, for all ages, rate classes and durations at which the policy is available.

Signed:		
Date:	10/10/2011	

Virgil Meier, FSA, MAAA

Director Actuarial